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October 21, 1981
TWO DOLLARS

Implement&Tractor

The business magazine of the farm & industrial equipment industry

Could you learn to love your parts business like Don Hill loves his? page 8

Servicing Electronics in Ag Equipment page 10

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INTERTEC PUBLISHING CORP.

Implement&Tractor

The business magazine of the farm & industrial equipment industry

in this issue...

8: **Could You Learn to Love Your Parts Business Like Don Hill Loves His?** A three-time turn with a volume around 35 per cent of total—and careful management by well-trained people—would make it easy.

10: **Electronics in Ag Equipment: What's the Dealer Service Angle?** How proficient will the dealer's service department have to be in dealing with electronic devices? Theory is not essential, but ability and equipment for diagnosis will be.

18: **The 50 Series From Deere.** A look at Deere & Co.'s new big four-wheel-drive tractors being shown to dealers and consumers at major fall farm shows.

26: **IH: Five Two-Wheelers, 90 to 185 HP.** Forward air cooling is a major feature of International's five new tractors introduced to dealers last month.

On the cover...Don Hill's Circleville, Ohio, dealership showroom is filled with displays of farm equipment parts in visual storage.

DEPARTMENTS

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AUCTION PRICES OF USED EQUIPMENT

An exclusive I&T monthly report of actual prices paid recently at these leading national wholesale auctions.

Asterisk beside tractor price indicates highest bid offered on tractors which were not sold.

JONES FARM EQUIPMENT
Dothan, Alabama
September 8, 1981

ALLIS-CHALMERS TRACTORS

7080 diesel, cab, 1978 (Good) 16,500*
7040 diesel, cab, duals, 1977 (Good) 12,500*
7040 diesel, duals, 1977 (Good) 10,500*
7020 diesel, cab, 1978 (Good) 11,500*
WD, 1950 (Good) 475

CASE TRACTORS

1070 diesel, 1970 (Fair) 3200
970 diesel, 1974 (Fair) 2850
530 diesel, 1963 (Good) 2200

DEUTZ TRACTOR

4506, (Fair) 2350

DAVID BROWN TRACTOR

990 diesel, 1967 (Excellent) 2300*

MASSEY-FERGUSON TRACTORS

1085 diesel, 1975 (Excellent) 7300
210 diesel, 1980 (Excellent) 3700*
175 diesel, 1974 (Excellent) 4500*
175 diesel, 1973 (Excellent) 4700
175 diesel, 1971 (Good) 4000
175 diesel, 1971 (Good) 4000
165 diesel, 1968 (Good) 3300
165 diesel, 1968 (Good) 3250
165 diesel, 1967 (Good) 3350
135, 1966 (Fair) 2050
135, 1966 (Fair) 2350
135, 1966 (Good) 3200
65, diesel, 1963 (Good) 2050
65 diesel, 1959 (Good) 1875
50, 1962 (Fair) 1100
35, 1963 (Good) 1600*
35, 1960 (Fair) 1300*
35 diesel, 1958 (Good) 1100
35, 1958 (Fair) 1275
35, 1957 (Good) 1650
35, 1957 (Good) 1850
35, 1956 (Good) 1600
35, 1956 (Good) 1600
30, 1952 (Fair) 825
30, 1952 (Good) 1000
30, 1952 (Excellent) 1400
20, 1950 (Good) 1125
20, 1948 (Good) 1150*
20, 1948 (Good) 1225*

FORD-FERGUSON TRACTOR

9N, 1946 (Fair) 550

FORD TRACTORS

8700 diesel, 1977 (Good) 7900
8600 diesel, cab, 1974 (Good) 5600*
8600 diesel, 1974 (Good) 5000*
7700 diesel, 1978 (Excellent) 13,750
TW20 diesel, 1979 (Good) 14,900*
TW20 diesel, 1979 (Good) 15,000*
TW20 diesel, 1979 (Excellent) 15,900
5000 diesel, 1974 (Excellent) 5700*
4000 diesel, 1968 (Rough) 1900*
4000, 1963 (Fair) 1500
3400 diesel, ldr., backhoe, 1972 (Good) 4600*
3000 diesel, 1972 (Good) 3600*
Sup. Dex. 1963 (Excellent) 2700
861 diesel, 1958 (Fair) 1500
860, 1956 (Excellent) 2450
641, 1960 (Good) 2000*
641, 1958 (Good) 2000
Jub., 1953 (Good) 1625
Jub., 1953 (Fair) 1275
8N, 1952 (Good) 1300
8N, 1950 (Good) 1175
8N, 1950 (Good) 1200
8N, 1949 (Good) 1100

INTERNATIONAL HARVESTER TRACTORS

756 diesel, 1969 (Fair) 3100
706 diesel, 1964 (Fair) 3000
574 diesel, 1972 (Excellent) 5400
574 diesel, 1972 (Good) 4300*
3414 diesel, ldr., backhoe, 1962 (Good) 3200*
B414 diesel, 1962 (Good) 1375
Sup. C, 1949 (Fair) 325
100, cult., 1955 (Good) 1625
Cub, 1949 (Good) 1100
Cub, mo., 1949 (Good) 1300

JOHN DEERE TRACTORS

6030 diesel, duals, 1973 (Excellent) 8700*
4630 diesel, duals, 1974 (Good) 10,500*
4620 diesel, duals, 1972 (Good) 9100*
4430 diesel, 1974 (Good) 9600*
4230 diesel, cab, duals, 1975 (Good) 12,000
4020 diesel, 1968 (Good) 5000*
3020 diesel, 1969 (Excellent) 6100*
3020 diesel, 1968 (Good) 4700
3010, 1962 (Fair) 2200
3010 diesel, 1962 (Good) 3050*
224 diesel, 1978 (Excellent) 6100
2030 diesel, 1974 (Good) 5000*
2020 diesel, 1966 (Good) 3800*
2010 diesel, 1963 (Fair) 1050*
2010, 1963 (Fair) 950
400 diesel (Fair) 1450*
40, cult., plt., plow, mo., 1954 (Good) 750
B, 1942 (Rough) 150

LONG TRACTORS

900 diesel, 1975 (Good) 2450
384 diesel, 1971 (Rough) 1100
384 diesel, 1971 (Rough) 1050

KUBOTA TRACTORS

245 diesel, 1979 (Excellent) 3850
L185 diesel, turbo, 1979 (Excellent) 3700

OLIVER TRACTORS

1850 diesel, 1966 (Good) 3300
1655 diesel, 1975 (Good) 3500
1655 diesel, 1975 (Fair) 3100
1655 diesel, 1974 (Good) 3750
1600 diesel, 1963 (Fair) 1400
770 LP, 1960 (Fair) 775
550, 1964 (Good) 1925*

NOTES
Prices reported are for individual sales at wholesale on "as is," "cash and carry" basis.
Prices reported are NOT averages.

Condition classifications: EXCELLENT means—Engine: in perfect condition, 400 to 600 hours of use; Rubber: 80% tread remaining, no breaks or cracks; Paint: original and bright; General Appearance: excellent.

GOOD means—Engine: good running condition; Rubber: 70% tread remaining, no breaks or cracks; Paint: original paint or a good repaint job; General Appearance: good over-all.

FAIR means—Engine: possibly in need of a minor overhaul to restore; Rubber: 60% tread remaining, some cracking evident in side walls; Paint: only fair, weathered and some rust apparent; General Appearance: worn, some dents, minor parts such as gage covers missing or broken.

ROUGH means—Engine: obviously in need of a major overhaul; Rubber: smooth; Paint: scarred, weathered, rusty, needs painting urgently; General Appearance: dents, ruptures, broken parts, loose wires, some components such as lights broken, missing or inoperative.

DEMONSTRATOR means—used for demonstrating only and in practically new condition.

Don't sell too low...

and don't pay too much...

stay up-to-date on used equipment values with I&T

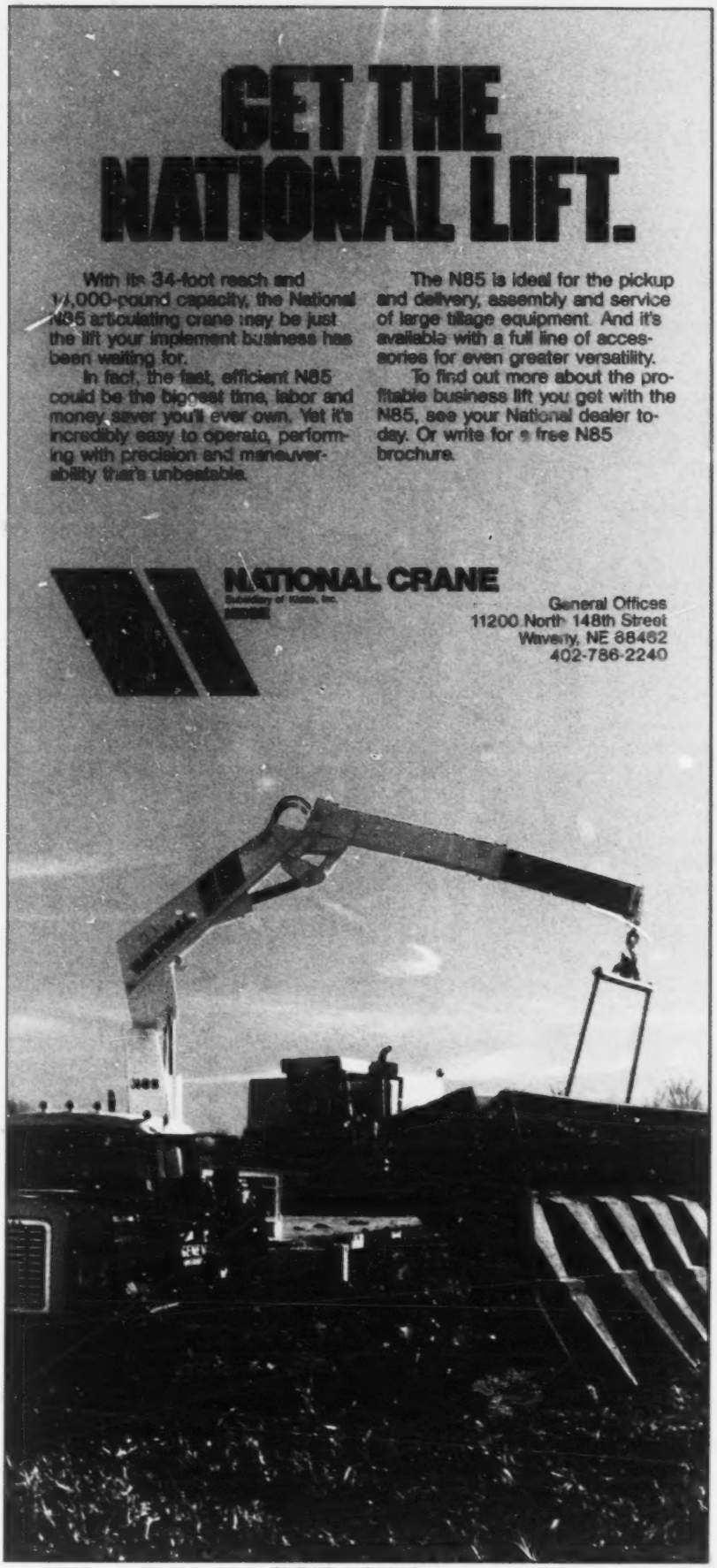
RETAIL SALES OF SELECTED FARM EQUIPMENT – Jan.-July, 1980 and 1981(1)
(In Units)

	Combines Self-Propelled		Corn Heads		Hay Balers(2)		Windrowers Self-Propelled Power Units		Windrowers Self-Propelled Total Heads		Grinder-Mixers		Shear-Bar Forage Harvesters(3)	
	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981
Alabama	85	75	22	21	87	144	2	.....	1	.....	88	57	6	26
Alaska	2	.....	.....	.....	10	10	.....	.....	.....	.....	1	1	.....	.....
Arizona	34	56	.....	1	28	40	47	43	57	51	6	3	6	10
Arkansas	185	335	.....	1	138	214	.....	2	.....	2	47	30	4	11
California	150	216	13	26	110	126	185	203	206	221	3	4	34	37
Colorado	189	170	46	39	242	236	132	129	142	132	44	42	31	17
Connecticut	.....	1	.....	.....	42	35	.....	.....	.....	.....	.....	.....	11	14
Delaware	13	15	9	10	7	7	1	1	1	1	7	5	5	1
Florida	37	18	27	10	42	46	.....	1	.....	1	28	10	14	11
Georgia	174	234	121	91	110	148	1	.....	1	.....	176	67	37	42
Hawaii	.....	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	2	.....
Idaho	99	201	8	3	403	339	240	191	239	195	37	20	34	24
Illinois	838	850	790	732	236	177	15	8	15	9	330	252	111	113
Indiana	501	428	522	400	203	227	6	6	6	6	241	159	85	61
Iowa	908	893	910	874	190	217	93	103	98	110	785	582	254	180
Kansas	1,144	896	135	57	207	218	204	190	206	200	160	105	101	64
Kentucky	115	139	70	74	202	212	3	25	3	28	223	128	57	66
Louisiana	110	138	3	2	31	74	.....	.....	.....	.....	12	6	11	7
Maine	2	2	.....	.....	46	49	2	.....	2	.....	.....	1	17	13
Maryland	56	41	53	50	80	58	8	4	8	4	27	17	29	27
Massachusetts	.....	.....	.....	.....	33	33	6	.....	6	.....	1	.....	7	7
Michigan	145	189	124	133	210	192	41	33	42	34	157	128	176	134
Minnesota	461	620	350	362	464	443	349	343	358	348	372	348	341	290
Mississippi	155	173	1	6	46	92	1	.....	1	.....	25	23	29	19
Missouri	389	485	184	118	322	377	51	36	54	37	346	221	56	52
Montana	192	289	2	2	210	186	215	257	228	280	45	24	17	14
Nebraska	592	555	407	326	125	130	188	174	197	186	341	229	117	107
Nevada	1	1	.....	.....	28	23	27	27	30	29	2	2	7	4
New Hampshire	.....	.....	.....	.....	40	37	.....	.....	.....	.....	.....	2	8	10
New Jersey	10	5	8	5	21	22	.....	.....	.....	.....	6	6	8	5
New Mexico	19	29	5	1	82	86	42	34	44	34	9	6	.....	1
New York	44	36	67	46	471	377	44	32	45	33	81	70	318	257
North Carolina	116	121	102	97	204	190	2	.....	2	.....	104	74	30	25
North Dakota	357	664	14	21	89	45	236	348	248	377	89	75	38	38
Ohio	446	364	344	287	327	332	6	8	6	8	259	173	119	109
Oklahoma	355	397	6	3	366	382	77	82	83	84	84	50	16	15
Oregon	89	104	4	5	292	217	149	130	157	149	19	14	22	26
Pennsylvania	69	68	84	48	491	468	38	35	40	35	202	138	235	189
Rhode Island	.....	.....	.....	.....	3	1	.....	.....	.....	.....	.....	.....	1	.....
South Carolina	76	76	34	22	49	59	.....	.....	.....	.....	44	22	15	16
South Dakota	229	257	88	74	52	53	325	272	352	288	217	127	100	87
Tennessee	126	121	52	24	314	365	1	2	1	2	137	92	43	50
Texas	586	870	128	118	434	781	65	63	71	76	138	102	53	41
Utah	12	25	1	1	228	206	71	73	72	76	21	7	29	19
Vermont	.....	1	.....	.....	83	79	2	3	2	4	.....	2	65	50
Virginia	54	47	44	36	305	215	6	6	6	6	65	38	62	46
Washington	175	256	13	12	298	243	119	84	118	96	14	7	64	50
West Virginia	.....	2	.....	2	109	102	.....	.....	.....	.....	18	8	2	7
Wisconsin	141	165	173	167	917	787	234	167	236	168	344	292	938	710
Wyoming	25	36	1	4	107	134	96	96	96	99	14	11	10	9
U.S. Government	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Miscellaneous (4)	.....	3	.....	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
TOTAL	**9,506**	**10,667**	**4,966**	**4,323**	**9,014**	**9,234**	**3,330**	**3,211**	**3,480**	**3,409**	**5,369**	**3,780**	**3,775**	**3,111**

Data released September 22, 1981, Farm & Industrial Equipment Institute.

(1) Includes revisions for prior months.
(2) For making bales of under 200 lbs.
(3) Pull-type, mounted, self-propelled.
(4) Sales reported as miscellaneous are retail sales which cannot be classified by state or as U.S. Government. They include sales and dispositions that do not go through usual marketing channels such as gifts to non-profit organizations, intra-plant or company transfers, etc.

Mower Conditioners All Types 1980	1981	Manure Spreaders Conveyor-Type 1980	1981	
95	127	15	10	Alabama
2	9	1	2	Alaska
8	11	6	5	Arizona
258	350	70	65	Arkansas
30	36	26	31	California
95	91	49	35	Colorado
64	35	49	42	Connecticut
14	6	43	34	Delaware
33	44	19	17	Florida
164	161	33	17	Georgia
.....	.....	1	.....	Hawaii
96	110	69	64	Idaho
402	387	401	349	Illinois
329	373	314	323	Indiana
685	664	873	866	Iowa
374	433	152	91	Kansas
609	676	210	188	Kentucky
31	56	18	12	Louisiana
64	67	68	43	Maine
72	70	158	98	Maryland
36	33	49	51	Massachusetts
399	305	486	438	Michigan
681	704	816	773	Minnesota
53	77	11	16	Mississippi
892	1,058	232	173	Missouri
89	125	34	15	Montana
306	298	268	126	Nebraska
4	6	5	2	Nevada
47	37	40	26	New Hampshire
36	20	35	27	New Jersey
11	18	5	4	New Mexico
733	661	832	832	New York
172	167	104	79	North Carolina
70	140	66	46	North Dakota
526	472	545	474	Ohio
444	494	41	22	Oklahoma
197	145	71	47	Oregon
618	516	824	692	Pennsylvania
2	2	.....	.....	Rhode Island
53	91	22	9	South Carolina
44	74	135	124	South Dakota
436	570	129	94	Tennessee
749	1,090	99	103	Texas
105	126	79	54	Utah
136	111	144	125	Vermont
539	365	158	97	Virginia
167	143	88	59	Washington
117	111	42	41	West Virginia
1,573	1,156	1,319	1,181	Wisconsin
23	40	29	17	Wyoming
.....	.....	.....	.....	U.S. Government
.....	.....	.....	.....	Miscellaneous
12,683	**12,864**	**9,283**	**8,039**	**TOTAL**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RETAIL SALES OF WHEEL TRACTORS*
(In Units)

	Total Wheel Tractors†				Cumulative for Jan.-July, 1980				Cumulative for Jan.-July, 1981			
	July, 1980		July, 1981		Farm Type				Farm Type			
	Farm	Non-Farm	Farm	Non-Farm	2-Wheel Drive	4-Wheel Drive	Total Farm	Non-Farm	2-Wheel Drive	4-Wheel Drive	Total Farm	Non-Farm
Alabama	180	28	170	29	1,481	51	1,532	236	1,072	22	1,094	193
Alaska	1	6	1	3	11	6	17	19	16	1	17	33
Arizona	50	49	108	23	468	58	526	283	429	45	474	236
Arkansas	222	42	337	26	2,031	213	2,244	308	1,666	206	1,872	196
California	452	288	568	158	2,557	214	2,771	1,607	2,518	282	2,800	1,255
Colorado	151	69	133	41	662	118	780	391	615	131	746	270
Connecticut	24	17	20	6	167	3	170	117	111	2	113	78
Delaware	8	8	14	8	100	5	105	25	77	2	79	20
Florida	281	106	240	102	1,466	46	1,512	691	1,338	41	1,379	645
Georgia	307	64	225	43	2,040	33	2,073	321	1,497	18	1,515	319
Hawaii	8	3	6	5	36	1	37	58	37	5	42	45
Idaho	117	11	114	19	620	73	693	87	797	143	940	94
Illinois	406	78	581	71	2,871	446	3,317	479	2,685	482	3,167	424
Indiana	305	39	280	25	1,775	271	2,046	289	1,496	229	1,725	203
Iowa	474	15	665	30	3,248	329	3,577	172	3,371	394	3,765	149
Kansas	458	29	459	5	2,024	433	2,457	217	1,496	319	1,815	150
Kentucky	355	42	293	84	2,563	45	2,608	292	2,102	27	2,129	313
Louisiana	255	52	383	68	1,667	162	1,829	362	1,727	152	1,879	440
Maine	44	4	21	9	152	2	154	56	144	3	147	45
Maryland	45	27	56	31	428	24	452	188	323	15	338	213
Massachusetts	30	27	16	11	99	.....	99	155	98	.....	98	144
Michigan	220	88	265	42	1,392	138	1,530	486	1,447	216	1,663	374
Minnesota	325	21	437	20	2,157	329	2,486	236	2,439	366	2,805	171
Mississippi	245	43	297	17	2,050	167	2,217	235	1,564	116	1,680	167
Missouri	312	50	403	22	2,305	144	2,449	355	1,942	176	2,118	249
Montana	150	24	148	13	708	166	874	138	540	166	706	86
Nebraska	226	16	296	15	1,947	225	2,172	107	1,678	171	1,849	94
Nevada	17	10	6	10	77	7	84	78	48	7	55	71
New Hampshire	11	14	23	9	82	.....	82	54	77	.....	77	54
New Jersey	28	55	22	31	184	2	186	293	136	.....	136	254
New Mexico	32	24	45	13	266	15	281	137	215	25	240	133
New York	267	100	263	54	1,498	61	1,559	542	1,353	108	1,461	430
North Carolina	281	67	228	51	2,054	31	2,085	389	1,578	29	1,607	329
North Dakota	138	11	250	14	797	419	1,216	82	1,079	465	1,544	57
Ohio	299	82	288	43	2,194	213	2,407	516	1,791	227	2,018	390
Oklahoma	420	97	414	39	1,633	238	1,871	379	1,395	180	1,575	400
Oregon	148	30	143	11	810	43	853	224	708	58	766	169
Pennsylvania	194	111	202	47	1,344	36	1,380	631	1,164	40	1,204	476
Rhode Island	2	1	.....	.....	11	.....	11	27	13	.....	13	18
South Carolina	111	44	146	30	965	32	997	213	701	25	726	211
South Dakota	165	5	235	3	868	139	1,007	52	820	154	974	37
Tennessee	273	62	252	22	1,964	57	2,021	258	1,613	38	1,651	189
Texas	1,072	345	1,585	356	5,725	355	6,080	2,131	5,819	353	6,172	2,163
Utah	52	34	56	26	383	17	400	197	385	17	402	169
Vermont	53	5	35	4	201	.....	201	21	184	3	187	30
Virginia	178	54	156	22	1,371	19	1,390	343	962	14	976	229
Washington	195	32	182	42	1,095	98	1,193	260	877	107	984	253
West Virginia	45	20	43	12	316	.....	316	126	213	.....	213	80
Wisconsin	393	53	386	15	2,803	122	2,925	292	2,552	159	2,711	224
Wyoming	44	17	55	7	204	24	228	100	234	25	259	96
U.S. Government	68	154	1	13	138	.....	136	537	9	.....	9	60
Miscellaneous‡	38	60	33	88	228	.....	228	424	148	.....	148	403
TOTAL	**10,175**	**2,735**	**11,585**	**1,888**	**64,236**	**5,630**	**69,866**	**16,219**	**57,299**	**5,764**	**63,063**	**13,533**

Data released September 22, 1981, Farm & Industrial Equipment Institute.

*Figures do not include garden tractors, motor tillers or contractors off-highway types. Report includes units marketed by these firms: Allied Farm Equip. (Leyland Satoh); Allis-Chalmers; Belarus; J I Case; Deere; Deutz; Ford; International Harvester; Long; Massay-Ferguson; R. M. Wade (Satoh); Steiger; Versatile; and White.

†The monthly sales are those reported for that month only. The cumulative totals are subject to revision reflecting updating in the basic sales data.

‡Sales reported as miscellaneous are retail sales which cannot be classified by state or as U.S. Government. They include sales and dispositions that do not go through usual marketing channels such as gifts to non-profit organizations, intra-plant or company transfers, etc.